

# CENTER FOR BEAM PHYSICS SEMINAR

## “Wake Fields, Impedance and Collective Effects”

Stefano de Santis  
CBP (LBNL)

Friday May 24, 2002, 10:30 AM  
Albert Ghiorso Conference Room (71-264), LBNL  
••• Refreshments served at 10:20 AM •••

Abstract: This talk is a report of recent activities on wake fields, impedances and collective effects. Some theoretical considerations on the coaxial wire technique for measuring beam impedances will be illustrated, together with test measurements results on the Relativistic Klystron Two-beam Accelerator's BPMs and SPEAR3 injection kicker. Calculations of single-bunch beam break up for the Berkeley Femtosource and multi-bunch instabilities for NLC's damping rings will also be presented.

Biographical notes: Stefano De Santis was born in Naples, Italy. He received his M.Sc. in Electronics Engineering from University of Rome in 1993 and a Ph.D. in Applied Electromagnetism in 1998. From 1994 to 1997 he was a Research Associate at Laboratori Nazionali Frascati, working on DAΦNE's RF cavities and beam dynamics. In 1998 he joined LBNL as a postdoc in the ALS-Accelerator Physics Group. Since August 2000 he has been a Physicist in CBP's Beam Electrodynamics Group.